

SAFETY DATA SHEET

Date Printed: 04/25/2024

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SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Lithium Nitride

Product Code: LI-N-04

CAS Number: 26134-62-3

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351
Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Substances/mixtures which, in contact with water, emit flammable gases

Category 1

Pyrophoric solids

Category 1

Skin Corrosion/Irritation Category 1 B

Serious Eye Damage/Eye Irritation Category 1

Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system

Signal Word

Danger

Hazard Statements

In contact with water releases flammable gases which may ignite spontaneously

Catches fire spontaneously if exposed to air

Causes severe skin burns and eye damage

May cause respiratory irritation



Precautionary Statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Do not allow contact with air

Keep away from any possible contact with water, because of violent reaction and possible flash fire

Handle under inert gas. Protect from moisture

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Brush off loose particles from skin. Immerse in cool water/wrap with wet bandages

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Store under an inert atmosphere

Store in a dry place. Store in a closed container

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Reacts violently with water

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component CAS-No Weight %

Lithium nitride 26134-62-3 <=100

SECTION 4. FIRST AID MEASURES

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison control center immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Ingestion Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Most important symptoms and effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Notes to Physician Treat symptomatically

SECTION 5. FIREFIGHTING MEASURES

Suitable Extinguishing Media Dry sand. Carbon dioxide (CO₂). Powder. Do not use water or foam. CO₂, dry chemical, dry sand, alcohol-resistant foam. Unsuitable Extinguishing Media No information available

Flash Point No information available

Method - No information available

Autoignition Temperature No information available

Explosion Limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes. Reacts violently with water.

Hazardous Combustion Products

Nitrogen oxides (NO_x). Lithium oxide. Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full

protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health

3

Flammability

4

Instability

2

Physical hazards

W

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.

Environmental Precautions

Should not be released into the environment. Do not allow material to contaminate ground water system. See Section 12 for additional Ecological Information. Do not flush into

surface water or sanitary sewer system.

Methods for Containment and CleanUp

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Do not expose spill to water.

SECTION 7. HANDLING AND STORAGE

Handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. Do not allow contact with water.

Storage

Corrosives area. Keep away from water or moist air. Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limits established by the region specific regulatory bodies

Engineering Measures None under normal use conditions. Ensure that eyewash stations and safety showers are

close to the workstation location. Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection No protective equipment is needed under normal use conditions. Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid

Appearance Red - Brown

Odor Ammoniacal

Odor Threshold No information available

pH No information available

Melting Point/Range 845 °C / 1553 °F

Boiling Point/Range No information available

Flash Point No information available

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available

Lower No data available

Vapor Pressure No information available

Vapor Density Not applicable

Specific Gravity 1.3 g/cm³

Solubility No information available

Partition coefficient; n-octanol/water No data available
Autoignition Temperature No information available
Decomposition Temperature No information available
Viscosity Not applicable
Molecular Formula Li3 N
Molecular Weight 34.82

SECTION 10. STABILITY AND REACTIVITY

Reactive Hazard Yes
Stability Moisture sensitive.
Conditions to Avoid Exposure to moist air or water. Exposure to moisture.
Incompatible Materials Strong bases, Oxidizing agent
Hazardous Decomposition Products Nitrogen oxides (NOx), Lithium oxide
Hazardous Polymerization Hazardous polymerization does not occur.
Hazardous Reactions None under normal processing. Reacts

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information
Component Information
Toxicologically Synergistic
Products
No information available
Delayed and immediate effects as well as chronic effects from short and long-term exposure
Irritation No information available
Sensitization No information available
Mutagenic Effects No information available
Reproductive Effects No information available. Developmental Effects No information available.
Teratogenicity No information available. STOT - single exposure Respiratory system
STOT - repeated exposure None known
Aspiration hazard No information available
Symptoms / effects, both acute and delayed
Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
Endocrine Disruptor Information No information available
Other Adverse Effects The toxicological properties have not been fully investigated.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system. Persistence and Degradability May persist
Bioaccumulation/ Accumulation No information available. Mobility No

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14. TRANSPORT INFORMATION

DOT

UN-No UN2806

Proper Shipping Name LITHIUM NITRIDE

Hazard Class 4.3

Packing Group I

TDG

UN-No UN2806

Proper Shipping Name LITHIUM NITRIDE

Hazard Class 4.3

Packing Group I

IATA

UN-No UN2806

Proper Shipping Name LITHIUM NITRIDE

Hazard Class 4.3

Packing Group I

IMDG/IMO

UN-No UN2806

Proper Shipping Name LITHIUM NITRIDE

Hazard Class 4.3

Packing Group I

SECTION 15. REGULATORY INFORMATION

United States of America Inventory

Component

Lithium nitride

CAS-No

26134-62-3

TSCA

Listed

TSCA Inventory notification

Active

TSCA - EPA Regulatory Flags

-

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Lithium nitride

CAS-No

26134-62-3

DSL

-

NDSL

Listed

EINECS

247-475-2

PICCS

Listed

ENCS

-

AICS

Listed

IECSC

-

KECL

-

U.S. Federal Regulations

SARA 313

Not applicable

SARA 311/312 Hazard Categories

See section 2 for more information

CWA (Clean Water Act)

Not applicable

Clean Air Act

Not applicable

OSHA - Occupational Safety and Health Administration

Not applicable

CERCLA

Not applicable

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Component

Lithium nitride

Massachusetts

-

New Jersey

Listed

Pennsylvania

-

Illinois

-

Rhode Island

-

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product contains the following DHS chemicals:

Component

Lithium nitride

DHS Chemical Facility Anti-Terrorism Standard

APA (A placarded amount)

Other International Regulations

Mexico - Grade

No information available

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.